

Bell Work

19.Sept.17

Describe the difference(s), as you know them, between a solid and a liquid.

After Mr. Golden farts, by the fume hood (it is turned off), you can smell it on the other side of the room, why?

- Hint think gas

EQ: What value does *my* education
have in *my* future?

States of Matter, Characteristics, similarities,
differences, and descriptive vocab.

Home work

19Sept17

Pre Lab Separation of a homogeneous mixture

States of Matter

Solid



Liquid



Gas



Plasma



Your turn...

Write four (4) examples each for Solids, Liquids, and Gases. Try to use examples you have personally been in contact with

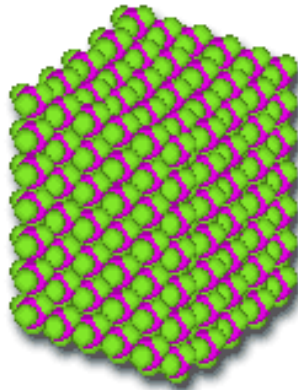
How they relate

Based on what you know about solids, liquids, and gases, how are the twelve (12) examples you came up with different, five (5) ways, and how are they similar, five (5) ways

The Three States of Matter We Will Consider...

Solids –

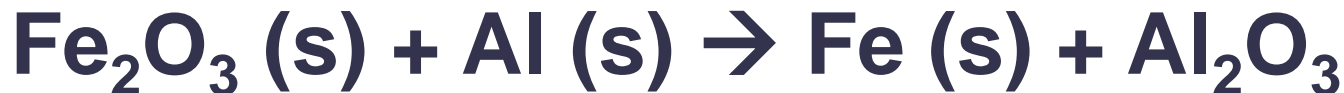
- **Orderly arrangement of particles that compose it: atoms, molecules, or ions**
- **Held in close proximity and are held together by forces that keep them in fixed positions**
- **Do not flow; difficult to compress**



The Three States of Matter We Will Consider...

Solids –

- Volume and shape are constant because of fixed position
- When heated, particles gain energy and the solid becomes a liquid
- Identified by and (s) in chemical equations



Recall

How do your “solids” that you listed fall into or are supported by the definition of a solid just listed?

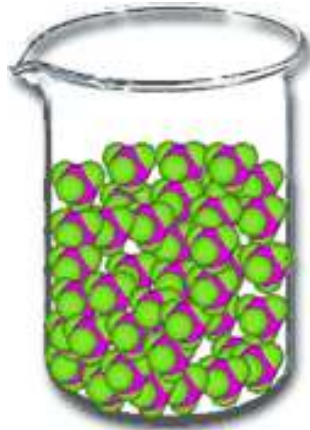
Tell your neighbor and be prepared to share

The Three States of Matter

We Will Consider...

Liquid –

- **Particles are farther apart than those of a solid, but still fairly close to one another**
- **Greater distance between particles allows them to flow**
- **Difficult to compress because the particles remain in contact even as they move about**



The Three States of Matter *We Will Consider...*

Liquid –

- Volume of a liquid is constant, but liquids can flow to change shape into that of its container
- Cooled = solid; heated = gas
- Identified by a (l) in a chemical equations



The Three States of Matter *We Will Consider...*

Gas –

- **Very large distances between particles that are moving at high speeds – 300 m/s**
- **Can be compressed because of large spaces between particles**
- **Always fill the volume and shape of the container in which they are placed**

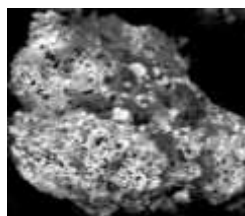
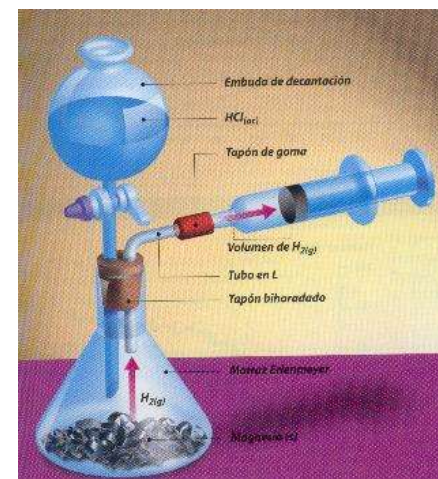


The Three States of Matter

Gas –

We Will Consider...

- Flow because particles are in constant motion
- Identified by a (g) in a chemical equations



Future Look: Stoichiometry



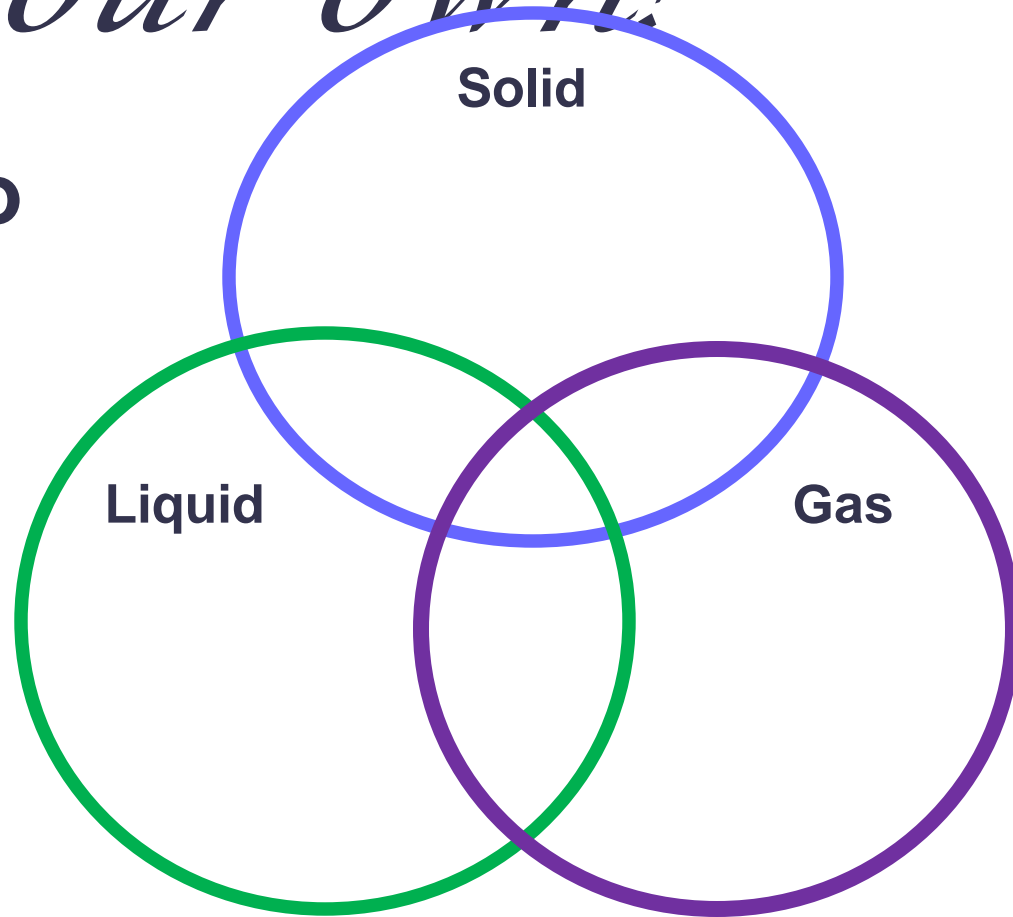
$$\frac{\text{gZn}}{1} \times \frac{1 \text{ mol Zn}}{65 \text{ g Zn}} \times \frac{1 \text{ mol H}_2}{1 \text{ mol Zn}} \times \frac{2 \text{ g H}_2}{1 \text{ mol H}_2} =$$

States of Mater link

http://www.google.com/url?q=http://www.youtube.com/watch%3Fv%3Ds-KvoVzukHo&sa=X&ei=1v9gTtXPOM_SiAKVtcGwDg&ved=0CDcQuAlwAA&usg=AFQjCNG2xSidH7SevFEYF8cep9yy5ae_rQ

Make it your own!

**Put these notes into
a different form
– a table or
Venn diagram!**



**How would a bubble fit into
each of the states/ phases of
matter?**